

**IN THE CLAIMS:**

1     1.     (Currently Amended) A conformable fuel cell, comprising:

2             (A)     a membrane electrolyte intimately interfacing with a catalyst layer  
3             along each of the membrane's major surfaces being a catalyzed membrane electro-  
4             lyte, having an anode aspect and a cathode aspect, and which catalyzed membrane  
5             electrolyte is conformable to ~~any~~a plurality of desired shapes;

6             (B)     diffusion layers sandwiching said catalyzed membrane electrolyte,  
7             said diffusion layers being comprised of materials that are conformable;

8             (C)     flexible current collectors coupled with each of said anode aspect  
9             and said cathode aspect of said membrane electrolyte;

10            (D)     a ~~conformable~~-fuel delivery means coupled with said anode aspect  
11            of said membrane electrolyte that delivers fuel substantially uniformly to said an-  
12            ode aspect while said fuel cell maintains ~~said a~~ desired shape, ~~said fuel delivery~~  
13            ~~means thereby maintaining high compression along the active surfaces of the fuel~~  
14            ~~cell;~~

15            (E)     a conformable fuel cell housing formed from a molded plastic  
16            frame that has been formed according to said desired shape, said conformable fuel  
17            cell housing maintaining high compression along the active surfaces of the fuel  
18            cell; and

19            (EF)    electrical coupling disposed across said anode aspect and said  
20            cathode aspect and having means for connection to an application device being  
21            powered by said fuel cell.

1     2.     (Original) The conformable fuel cell as defined in claim 1 wherein said current  
2     collectors at each of said anode aspect and said cathode aspect apply adequate compres-  
3     sion effectively over the active area of the membrane electrolyte.

1 3. (Original) The conformable fuel cell as defined in claim 2 wherein said compres-  
2 sion applied to said active area is equal to or greater than about 100 psi.

1 4. (Previously Presented) The conformable fuel cell as defined in claim 1 further  
2 comprising management of water from cathode to anode such that water management is  
3 achieved within the fuel cell.

1 5. (Original) The conformable fuel cell as defined in claim 1 wherein said fuel is  
2 substantially comprised of at least one of the following: a vapor fuel, a gel fuel, a liquid  
3 fuel and combinations thereof.

1 6. (Previously Presented) The conformable fuel cell as defined in claim 1 further com-  
2 prising a dedicated layer of material that substantially expands upon hydration, thus im-  
3 parting compression.

1 7-11 (Cancelled)

1 12. (Previously Presented) The conformable fuel cell as defined in claim 1 wherein  
2 said conformable fuel cell is shaped to conform to one of the following:

- 3 (A) a body segment; and  
4 (B) a contoured wall of an application device; and  
5 (C) an exterior housing or an interior volume of an application device.

1 13. (Previously Presented) The conformable fuel cell as defined in claim 1 wherein  
2 said conformable fuel cell is configured to attach to an article of clothing mechanically.

1 14. (Previously Presented) The conformable fuel cell as defined in claim 1 wherein  
2 fuel delivery is accomplished from a detachable conduit that connects to said anode as-  
3 pect of the fuel cell.

1 15-25 (Cancelled)

2 26. (Previously Presented) The conformable fuel cell as defined in claim 1 further  
3 comprising a dedicated layer of material that substantially expands upon exposure to fuel,  
4 thus imparting compression.

1 27. (Previously Presented) The conformable fuel cell as defined in claim 1 further  
2 comprising a dedicated layer of material that substantially expands upon exposure to  
3 heat, thus imparting compression.

1 28 (Previously Presented) The conformable fuel cell of claim 1, wherein the con-  
2 formable fuel delivery means comprises a layer of gelled fuel.

1 29 (Currently Amended) The conformable fuel cell of claim 1, wherein the conform-  
2 able fuel delivery means is affixed to the anode aspect of the ~~current collector~~fuel cell.

1 30. (New) A conformable fuel cell, comprising:

2 (A) a membrane electrolyte intimately interfacing with a catalyst layer  
3 along each of the membrane's major surfaces being a catalyzed membrane electro-

4 lyte, having an anode aspect and a cathode aspect, and which catalyzed membrane  
5 electrolyte is conformable to a plurality of desired shapes;

6 (B) diffusion layers sandwiching said catalyzed membrane electrolyte,  
7 said diffusion layers being comprised of materials that are conformable;

8 (C) flexible current collectors coupled with each of said anode aspect  
9 and said cathode aspect of said membrane electrolyte;

10 (D) a conformable fuel cell housing formed from a molded plastic  
11 frame that has been formed according to a desired shape, said conformable fuel  
12 cell housing maintaining high compression along the active surfaces of the fuel  
13 cell;

14 (E) a gel compartment containing a gelled fuel substance, wherein the  
15 gel compartment follows the desired shape of the conformable fuel cell housing;  
16 and

17 (F) electrical coupling disposed across said anode aspect and said  
18 cathode aspect and having means for connection to an application device being  
19 powered by said fuel cell.